

THE CLAIMS

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1. A switching hub for Ethernet network comprising:
- a casing including a wall;
  - a plurality of industrial connector assemblies mounted to said wall and extending therethrough, each connector assembly including a receptacle of rigid non-conducting material defining an opening and an externally threaded extension extending exterior of said wall of said casing, an RJ45 connector received in said opening a sealing ring interposed between said receptacle and (said wall said housing;)
  - a quick disconnect connector including an outer threaded portion mounted to said wall, an insert of rigid non-conducting material, and a plurality of connecting elements carried by said insert; and
  - an Ethernet switch controller within said housing and including a transceiver circuit coupled to each of said plurality of RJ45 connectors.
2. The apparatus of claim 1 wherein said casing includes an upper wall a surrounding side wall, and a bottom wall for support;
- said upper wall including a central portion in which said connector assemblies are mounted and a portion extending to one side of said central portion on which said quick disconnect connector is mounted.

3. The apparatus of claim 1 wherein each of said receptacles includes a peripheral flange for engaging said wall of said casing when said receptacle is assembled thereto;

a side wall extending through an associated aperture in a top wall of said casing, a peripheral groove in said flange; and

a sealing ring in said peripheral groove for forming a seal between said receptacle and said top wall of said casing.

4. The apparatus of claim 3 wherein said sidewall of said receptacle defines a second threaded portion extending through said top wall of said casing and located below said first-named threaded portion;

further including a threaded nut received on said second threaded portion to secure said receptacle to said casing.

5. The apparatus of claim 3 wherein said casing further includes a curved recessed adjacent said cylindrical side wall and extending adjacent said external threads of said extensions; and

a second sealing ring in said recess for sealing with a coupling of a mating connector.

6. The apparatus of claim 4 wherein said opening of said receptacle includes a generally rectangular cavity for receiving said Ethernet connector; and

a pair of opposing recesses for receiving projecting ears of locating said Ethernet connectors relative to said receptacle.

7. The apparatus of claim 1 further comprising a printed circuit board within said casing, said quick disconnect connector including a plurality of connecting pins coupled with said circuit board.

8. The apparatus of claim 7 wherein said quick disconnect connector includes an exterior cylindrical wall defining a peripheral recess, (said peripheral wall) and extended through an aperture in an upper wall of (said reduce portion) of (said housing,) said apparatus further including a sealing ring in (said recessed) of (said sheathing) of said quick disconnect connector.

9. The apparatus of claim 7 further comprising (and LED) indicator for signaling a first color when applied power is of proper polarity and a second color when applied power is reversed in polarity.

10. This apparatus of claim 2 further comprising an LED adjacent each of said connector assemblies and adapted to signal the data transmission rate of its associated RJ45 connector.

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